

Protecting access to the intellectual property of the health sciences

It is no news that health sciences libraries, especially those serving large academic research institutions, continue to struggle to acquire and provide effective access to the world's research journal literature (both in the clinical and basic biomedical sciences). Although most of us strongly advocate the advantages and potential cost savings of a national and international electronic network infrastructure for the creation, management, distribution, and use of health sciences information resources, the transition from the current print-on-paper environment has been slow and complicated by serious unresolved intellectual property issues.

Both the quantities and prices of newly published information in all formats continue to grow at exponential rates, far outpacing library budget resources. The result for most research libraries, including those serving the health sciences, is that they are individually and collectively able to provide convenient, reliable, reasonable-cost access to a smaller and smaller proportion of the world's new biomedical research results.

I have argued previously that these trends are evidence of a very distorted economic marketplace for scholarly information and these distortions may be leading to what Garrett Hardin has called a "tragedy of the commons" [1]. Like the common property pasture shared by an agrarian community in Hardin's famous example, the resources of research libraries (both the collections of books, journals, and other materials and the acquisitions budgets of these institutions) are common property that individual researchers and publishers freely exploit for prestige, career advancement, or profit. This

exploitation occurs largely without any consideration of the long-term future consequences for our system of scholarly communication.

Publishers exploit research libraries through journal pricing strategies that maximize profits in ever-narrower market niches. Biomedical research faculty further their personal academic careers and win additional grant support by publishing as much as possible and then insisting on unlimited free access in their institution's library to all other published information that might be of use. To paraphrase Hardin, therein is the tragedy. Each publisher and researcher is locked into a system that compels ever-increasing exploitation of library journal collections and budgets—in a world that is limited. Ruin is the destination toward which all rush, each pursuing individual best interests in a scholarly communication system that encourages unrestrained free expression and "free-market" profits. As Hardin succinctly puts it, "freedom in a commons [eventually] brings ruin to all" [2].

Supporting and aggravating these problems of our scholarly communication system are the U.S. and international laws governing intellectual property, in particular copyright. By providing for the free transfer of ownership from research authors who write the journal articles to publishers who print, market, and distribute them, copyright effectively removes marketplace incentives and constraints from the scholarly community. At the same time, this transfer of ownership provides publishers, especially the very large international scientific and technical publishing conglomerates, with enough monopoly power to con-

trol prices and the conditions under which research results are disseminated.

Late in 1991, a task force of the Triangle Research Libraries Network (TRLN), including librarians, faculty, and university press representatives from Duke University, North Carolina State University, and the University of North Carolina at Chapel Hill, was established to debate and refine a "Model University Policy Regarding Faculty Publication in Scientific and Technical Scholarly Journals." This effort was supported initially with a Council on Library Resources grant to plan strategies for cooperative information resources development in the sciences and engineering among the three triangle university library systems.

The TRLN model copyright policy, which, in its current July 1993 version, has been widely disseminated in both print and electronic formats, suggests a fundamental change from the current practice whereby faculty routinely transfer copyright for their articles to any publisher [3]. Instead, the policy recommends a system where faculty would be encouraged and supported to submit their articles to journals published by universities, scholarly associations, or other organizations sharing a mission to promote widespread, reasonable-cost access to research information. Where this is not possible, the policy recommends that universities support their faculty in granting only limited licenses to other publishers, with copyright retained by the author. Thus, in essence, the policy recommends bringing the products produced (the articles) back under the control of the producers (researchers and their universities).

The model policy also envisions a future scholarly communication system where electronic journal publication via a public, worldwide Internet is the norm.

More recently, a Task Force on Intellectual Property Rights in an Electronic Environment, organized as part of the Research Libraries Project of the Association of American Universities, has issued a report that includes most of the elements of the TRLN model policy in its "scenarios for change" [4]. This report recommends that universities develop coherent policies governing intellectual property subject to copyright law, as most have already done with intellectual property subject to patent law. The report also notes that the usefulness of the emerging electronic information highway for scholarly communication will depend on how copyright is managed in this new environment. The report's authors warn that "higher education will not prosper if universities fail to give focused coherent management attention to such a crucial resource as the intellectual property their faculty produces" [5].

Although the TRLN model policy recommends individual faculty retention of copyright in some situations, it does not envision a system where individual researchers act as their own publishers. The peer-review and editing processes embodied in the current print journal system must and can be transferred to the world of electronic publishing over the Internet. Thus, the technical systems and scholarly communication policies needed to support a new system for the dissemination of scholarly research results will require consensus deliberations and collaboration among all the current participants: libraries, scholarly associations, and publishers.

I strongly urge all MLA members to become familiar with these important intellectual property issues and to look for opportunities to engage faculty, students, publishers, legislators, and others in discussions and debates about shaping a health sciences scholarly communication system that will continue to ensure the widest possible reasonable-cost access to all important research results.

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* The policy also appeared in the August 1993 *Newsletter on Serials Pricing Issues* no. 93-94, which can be retrieved electronically via gopher or FTP at "sunsite.unc.edu".